We claim: -

- The use of a polymer containing vinylamine units and having a
 K value (determined in 5% strength aqueous sodium chloride
 solution at 25°C, a pH of 7 and a polymer concentration of
 0.5% by weight) of from 30 to 150 as a promoter for the
 engine sizing of paper with alkyldiketenes.
- 10 2. The use as claimed in claim 1, wherein the K value of the polymer containing vinylamine units is from 60 to 90.
- 3. The use as claimed in claim 1 or 2, wherein a hydrolyzed poly-N-vinylformamide having a degree of hydrolysis of from 1 to 100% is used as the polymer containing vinylamine units.
- The use as claimed in any of claims 1 to 3, wherein the hydrolyzed poly-N-vinylformamide having a degree of hydrolysis of from 70 to 100% is used as the polymer containing vinylamine units.
 - 5. The use as claimed in any of claims 1 to 4, wherein polyvinylamine is used as the promoter.
- 25 6. The use as claimed in any of claims 1 to 5, wherein the polymer containing vinylamine units is used in an amount of from 0.0001 to 2.0% by weight, based on dry paper stock.

30

35

40